

Claims

- [c1] A culvert opening and cleaning apparatus for use with heavy machinery, comprising:
- a telescoping arm member adapted to be mounted to an implement of heavy machinery where the telescoping arm member having an outer housing and an inner concentric arm that are telescopically slidable relative to each other;
 - a culvert cleaning tool mounted to the inner arm of the telescoping arm member; and
 - a telescoping ram having at least one concentric cylinder and a piston that are telescopically slidable relative to each other and mounted in a substantially parallel side-by-side relationship relative to the telescoping arm, wherein a distal end of the piston is attached to the culvert cleaning tool for positing the culvert cleaning tool to be inserted in an opening of the culvert.
- [c2] The culvert opening and cleaning apparatus for use with heavy machinery of claim 1, wherein the telescoping ram is operable to be powered by an auxiliary hydraulic of the heavy machinery.
- [c3] The culvert opening and cleaning apparatus for use with

heavy machinery of claim 5, wherein the culvert cleaning tool is a tapered shoe.

[c4] The culvert opening and cleaning apparatus of claim 1, where the telescoping arm member is adapted to be mounted to the implement with a mounting bracket attached to said telescoping arm and where said mounting bracket is adapted to be mounted to a grader blade implement.

[c5] A culvert opening and cleaning apparatus for use with heavy machinery, comprising:
a telescoping extension cylinder arm adapted to be mounted to an implement of heavy machinery where the telescoping arm member having at least one interconnected extendable cylinder and an inner concentric arm that are telescopically slidable relative to each other; and
a culvert cleaning tool mounted to the distal end of the inner arm of the telescoping extension cylinder arm.

[c6] The culvert opening and cleaning apparatus for use with heavy machinery of claim 5, wherein the telescoping extension cylinder arm is operable to be powered by an auxiliary hydraulic of the heavy machinery.

[c7] The culvert opening and cleaning apparatus for use with heavy machinery of claim 6, wherein the telescoping arm

member is adapted to be mounted to the implement with a mounting bracket attached to said telescoping arm and where said mounting bracket is adapted with a curved mounting surface to be mounted to a grader blade implement.

[c8] The culvert opening and cleaning apparatus for use with heavy machinery of claim 1, wherein the culvert cleaning tool is a tapered shoe.

[c9] A method of opening and cleaning a culvert comprising the steps of:
mounting a culvert cleaning apparatus to a laterally distal end of a blade implement of a grader where the apparatus has a telescoping extension cylinder arm where a telescoping arm has a culvert cleaning tool attached to a distal end; and
laterally maneuvering the cleaning apparatus with lateral movement of the blade implement and vertically maneuvering the culvert cleaning tool with the cylinder arm to clean out the culvert and bend to its original form.